TRAUMATIC LESION OF THE PONS AND TEGMENTUM WITH DIRECT AND RETROGRADE DEGENERATION OF THE MEDIAN FILLET AND PYRAMID, AND OF THE HOMOLATERAL OLIVE.*

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Looking back on my own training in anatomy of the nervous system, I remember keenly the frequent feeling of discouragement over the discrepancy between the schematic presentation and the actual material, which more than the schemes, is the real salvation in case of doubt and the real field for experience and work.

One of the most disastrous consequences of schematic teaching is that the student does not learn how to deal open-mindedly and with equanimity, with the many unanalyzed parts, the unclassified residuum, which after all is material worth the greatest respect as the ground on which the help from discrepancies and uncertainties is bound to come. He ignores it, or fumbles with it, but refuses to meet it calmly for what it is worth.

It is my conviction that a method obviating this difficulty is furnished by a combination of accurate drawings and glass reconstructions, with a system of interpretations by colors. In this manner, that which is plain and simple stands out excellently and yet there will be no need of suppressing that which is the hope of the future. We can give a loud interpretation to the matters which appear safe, and a more tentative one to those which are tentative. The method is one of great advantage to the worker and its results do not have to be modified to become perfectly acceptable to students.

I beg to show the successive stages of presentation with the help of A. T. Thompson's Projection-reflectoscope, in connection with a communication of a rather interesting case of lesion of the pons.

The patient was an Italian who was stabbed in the left side of the neck in March, 1900, and evidently sustained a fracture of the skull. He remained unconscious for weeks, passed through a period with loss of speech, inability to swallow, paralysis of the right arm and leg and partial loss of sensation. He was admitted to Manhattan State Hospital July, 1901, on account of depression and threats of revenge, etc.; the tongue protruded to the right; he could walk unassisted. No accurate status was given. The patient died December 13, 1903, with chronic enteritis, and I owe to the Manhattan State Hospital the opportunity to have the case worked up in the laboratory of the Institute.

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The study of the whole brain and of serial sections showed a rather sharply outlined cutting out of nearly the entire left half of the pons. Only the deepest transverse layers are preserved. The pyramid is completely destroyed and about section 421 the tissue-defect involves the mesial fillet which was evidently cut through as well and brought to degeneration, with the exception of about one-half of the mesial fourth and a few bundles near the bend into the lateral fillet. The most posterior actual tissue-defect is seen in section 461, in the center of the left middle cerebellar arm, the most anterior in 190, *i. e.*, in the most anterior part of the pons.

The anatomical interest of the case lies in the secondary degeneration of the left mesial fillet, the so-called retrograde degeneration of the left pyramid, the degeneration of the left olive and its fleece, and the isolation of a number of bundles which are usually covered up. The series shows further a distinct defect of the left T_4 and a marked reduction of the marrow of the left temporal lobe (with remarkable integrity of the callosal radiation) and hardly any reduction of the anterior commissure.

In the glass-models many details are not entered on account of the small enlargements; but in a large model it will be possible to render the individual smaller tracts without danger of confusion. Furthermore, it is desirable, in order to avoid confusion, that a uniform color scheme be agreed upon for the demonstration of fiber tracts.